Fish, Wildlife & Parks Region 6
Prairie Dog Abundance and Distribution Objectives Plan

---Draft Environmental Assessment---

Montana Environmental Policy Act

Montana Fish, Wildlife & Parks

Rev. 11/18/2005

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Proposed Action

The Draft Region 6 Prairie Dog Abundance and Distribution Objectives Plan (the Draft Plan) tiers from Objective #2, Strategy B of the statewide Conservation Plan for Black-Tailed and White-Tailed Prairie Dogs in Montana (MPDWG 2002) formally adopted by Fish, Wildlife & Parks (FWP) in 2002. Objective #2 of this statewide plan called for the development of statewide and regional prairie dog distribution and abundance standards. Objective #2, Strategy A outlines statewide distribution and abundance standards. Objective #2, Strategy B calls for the development of regional distribution and abundance standards to cumulatively meet the statewide standards. Strategy B further called for the regional standards to be developed at the local level and includes considerations for the development of these standards. The primary purpose of the Draft Plan is to provide specific acreage and complex objectives for prairie dogs within the Region 6 Fish, Wildlife & Parks boundary in northeast Montana in accordance with Objective #2, Strategy B. Region 6 is the first FWP Region to develop a prairie dog abundance and distribution plan.

Originally, the Draft Plan was intended not only to identify the distribution and abundance standards but also to meet the requirements of the Montana Environmental Policy Act (MEPA). As the Draft Plan developed, FWP determined that an Environment Assessment (EA) would better meet MEPA requirements. Therefore, much of the language of the Draft Plan and EA will appear similar.

Purpose and Need for Proposed Action

The purpose of the Proposed Action is to help assure the long-term conservation of sustainable prairie dog and associated species populations in FWP Administrative Region 6. Furthermore, the purpose is to comply with the requirements outlined in the Conservation Plan for Black-Tailed and White-Tailed Prairie Dogs in Montana (MPDWG 2002) while continuing to meet its statutory and regulatory requirements for management of Montana's fish and wildlife resources.

Over their range, black-tailed prairie dogs have declined in abundance and distribution primarily as a result of extensive poisoning, loss of habitat, and plague. The prairie dog is an important native component of prairie ecosystems and provides unique habitat for a variety of associated species. Prairie dog conservation planning has been underway in Montana since the late 1980's when black-footed ferrets were being considered for re-introduction into parts of eastern Montana (MPDWG 2002).

The Montana Prairie Dog Working Group was organized and initiated development of a statewide prairie dog conservation plan in 1996. This effort was accelerated in 1998 when two range-wide petitions to list the black-tailed prairie dog as "threatened" under the federal Endangered Species Act were received by the U.S. Fish and Wildlife Service (USFWS) (MPDWG 2002). Upon review of the petitions and related information compiled by the involved states and after extensive public comment, the USFWS determined that listing of the black-tailed prairie dog was warranted but precluded due to a number of higher priority species also being

considered for listing (65 FR 5476). As a result, the black-tailed prairie dog was designated a "candidate species" in early 2000. As part of an annual review, the black-tailed prairie dog was dropped from candidacy by the USFWS in August 2004 (69 FR 51217). On February 2, 2005, the USFWS received a Notice of Intent to Sue regarding this finding from Forest Guardians et. al.

In 1998, states within the range of black-tailed prairie dogs organized the Interstate Prairie Dog Conservation Team to assess the range-wide status, threats, and conservation needs of prairie dogs and to develop a strategy that would help guide conservation efforts. That plan entitled, "A Multi-State Conservation Plan For The Black-tailed Prairie Dog, *Cynomys ludovicianus*, in the United States – an addendum to the Black-tailed Prairie Dog Conservation Assessment and Strategy, November 3, 1999" was published in 2003 (Luce 2003).

The Draft Plan is an offspring of all these broader planning efforts. It reflects a commitment by FWP and its partners to manage for black-tailed prairie dogs in Region 6 in a manner that is in alignment with the statewide plan, and meets the needs of prairie dogs and associated species, as well as landowners, businesses, and recreationists.

Objectives of the Action

The fundamental objective of the proposed action is to define prairie dog abundance and distribution standards in Region 6 that dovetail with the statewide plan to manage prairie dog populations and habitats to ensure long-term viability of prairie dogs and associated species. Additional objectives include identifying key considerations and an operational approach that will be used to define opportunities and constraints for where prairie dogs can be accommodated in Region 6 while considering the needs of landowners, agencies, wildlife, recreationists and Region 6 communities.

Relevant Plans, EISs, EAs, Regulations, and Other Documents

In FWP Region 6, the Bureau of Land Management (BLM) is working under 3 separate resource management plans, affecting primarily BLM administered lands. They include: 1) The Judith, Valley, Phillips Resource Management Plan; 2) The West Hi-Line Resource Management Plan; and 3) The Big Dry Resource Management Plan. Each of these documents provides management objectives related to prairie dogs on lands administered by the BLM.

The Judith, Valley, Phillips Resource Management Plan (JVPRMP) includes Valley and Phillips Counties within Region 6. The JVPRMP includes an objective to manage for 26,000 acres (10522 ha) of black-tailed prairie dogs in Phillips County south of Highway 2, also known as the "7k Complex." This is an overall objective including private, state, BLM, and USFWS-administered lands and reflects prairie dog levels observed in a 1988 survey. The primary intention of the 7k Complex is to re-establish a black-footed ferret population. Remaining portions of Phillips County as well as Valley County are not designated for ferret reintroduction and prairie dogs are intended to be managed at the 1988 levels and/or controlled based on the "values or problems encountered" (Record of Decision and Resource Management Plan Summary, JVPRMP and EIS, September 1994).

The West Hi-Line Resource Management Plan includes Hill, Blaine and Chouteau Counties within Region 6. This plan does not list specific acreage objectives and does allow for expansion and control of prairie dogs subject to policies regarding candidate, threatened, and endangered species. One particular prairie dog town is listed in the plan with an objective to manage to provide habitat for associated species and recreational shooting. Prairie dog towns under 10 acres (4 ha) will not be actively managed under this resource management plan.

The Big Dry Arm Resource Management Plan includes McCone, Richland, and Dawson Counties within Region 6. An acreage estimate of 2,500 acres (1012 ha) is reported for a larger 12-county area that is largely outside of Region 6. This resource management plan allows for natural fluctuations of prairie dogs and does not specifically prohibit control or expansion of prairie dogs.

Scope of Analysis

This EA analyzes potential impacts of adoption of prairie dog abundance and distribution objectives in Region 6 considered for implementation by FWP and as described in five separate alternatives. Alternative E (Proposed Action Alternative) represents proposed actions by FWP that are identified in the Draft Plan. Although this was developed through a collaborative effort involving state and federal agencies, non-governmental organizations, and individuals, the scope of this EA, undertaken as a requirement of MEPA involves only FWP actions. As federal agencies consider implementing related prairie dog conservation activities on agency-administered lands, these agencies will prepare separate analyses as per federal statutory requirements.

Decisions to be Made

The Region 6 Regional Supervisor will make a Record of Decision that will guide future prairie dog conservation activities in Region 6 by FWP. The decision may adopt one of the alternatives or a modification of one or more of the alternatives and will be based on the efficacy of the proposed action(s) to achieve distribution and abundance objectives; the environmental impacts described in this EA; and the comments received through public review of the Plan and this EA.

Other Agencies Having Jurisdiction or Responsibility

Montana Fish, Wildlife & Parks is responsible for managing and conserving all wildlife species within the state. FWP has therefore been a leading partner in the development and facilitation of this planning process. Other resource agencies have also been involved with prairie dog planning including USDI Bureau of Land Management (BLM), US Fish and Wildlife Service (USFWS), and the Montana Department of Natural Resources and Conservation (DNRC).

Public Involvement Process

Development of the Plan represents a collaborative effort involving a wide spectrum of stakeholders. The Conservation Plan for Black-Tailed and White-Tailed Prairie Dogs in Montana (MPDWG 2002) in Objective #2, Strategy B encouraged the formation of local working groups to facilitate the establishment of regional abundance and distribution objectives. It further identified that FWP was responsible for this effort. To that end, the Region 6 Prairie Dog Advisory Board was established and protocols to develop regional abundance and distribution objectives adopted in a Collaborative Process Agreement.

The Board committed to informal, voluntary negotiations and developed a work plan, timelines and anticipated outcomes during the first meetings. Further, ground rules and decision-making processes were developed. The Montana Consensus Council facilitated meetings of the Board.

Representatives on the board were from Region 6 and elsewhere in Montana. Individual members were selected to provide a diversified perspective in the conservation and management of prairie dogs. The board consisted of 12 individuals from the private sector, governmental agencies, and non-governmental organizations. Theses individuals represented the BLM, ranchers, local business, recreational shooting sports, Malta Chamber of Commerce and Agriculture, private landowners, USFWS, FWP, National Wildlife Federation, The Nature Conservancy, and Dept. of Natural Resources Conservation. All meetings were open to the public and participants from other organizations were invited to participate.

The Board developed a set of Key Considerations to be used in the development the Plan. Interested members of the Board developed and authored alternatives with the Key Considerations in mind. Three alternatives were authored by members of the board and were reformatted and included in the Plan. A fourth alternative (Alternative D, No Action) was developed by FWP in cooperation with managing agencies. A fifth alternative (Alternative E, Preferred Alternative) defining distribution and abundance objectives was developed through a collaborative process by board members. Portions of the previous 4 alternatives were included in Alternative E. Upon completion of the Draft Plan, it was submitted to the entire Board for comments and corrections.

In 2003, a group of landowners formed the South Phillips County Rancher Stewardship Alliance. Their purpose is to develop a ranching and wildlife stewardship plan that focuses specifically on black-tailed prairie dogs, black-footed ferrets, and sage grouse. Representatives from this group have been actively involved in the development of the Draft Plan. Additionally, Region 6 wildlife biologists met with many area landowners that who currently have prairie dogs on their land and were not part of the Board. These meetings were intended to gather ideas and issues by landowners and to assess interest in potential prairie dog management options.

The resulting Draft Plan and this EA are being provided to the public for additional comments. FWP will review public comment and incorporate responses into a Final EA and Final Plan. FWP Region 6 Supervisor will make a decision regarding the FWP actions identified in the EA in

the form of a Record of Decision. Final revisions will be made to the Plan in response to the Record of Decision and public comments.

Issues Identified Through Public Involvement

Public involvement on the Draft Plan appeared to fully represent the spectrum of perspectives on most aspects of prairie dog management in Montana and Region 6. Some issues raised though are outside of FWP's authority and therefore outside the scope of this EA. A summary of issues involving FWP, listed by category type, follows. A more complete review of issues is covered in the Draft Plan and other documents.

- Ecological Values

Prairie dog colonies enhance the heterogeneity of prairie ecosystems. Prairie dog management will affect the biodiversity and ecological processes of the prairie ecosystem. Prairie dogs also affect the rate of ecosystem processes including disturbance and nutrient cycling. Management of prairie dogs will have an impact on these processes as well.

- Associated Species

Prairie dog colonies provide associated wildlife species with food, shelter and required habitat features. Prairie dogs also serve as prey for a variety of predators. The black-footed ferret is an obligatory predator and also uses prairie dog burrows for shelter and protection. Many raptor species prey upon prairie dogs including golden eagles, ferruginous hawks, and prairie falcons. Other predators include badgers, coyotes, bobcats and prairie rattlesnakes. Other wildlife species use habitat features associated with prairie dog towns. The primary breeding habitat of burrowing owls is prairie dog towns. Mountain plovers prefer areas of extremely short vegetation created by sheep or prairie dog grazing and clipping of stems. Many other species are known to use prairie dog towns in Montana. Management of prairie dogs will have direct and/or indirect impacts on these and other wildlife species.

- Vegetation and Wildlife

The herbivory of prairie dogs alters the species composition and structure of plant communities. Native vegetation occurring on prairie dog towns is generally of earlier ecological succession compared to surrounding native prairie. Prairie dog towns typically support more annual forb and grass species and fewer perennials and shrub species. Changes in vegetation composition resulting from prairie dogs can have a positive, negative, or neutral effect on other wildlife species. Adverse impacts to vegetation and wildlife increases with increasing size of prairie dog colonies and closer spaced complexes.

- Livestock Grazing

Black-tailed prairie dogs feed primarily on grasses and forbs. The effect they have on forage availability for other grazers such as livestock is likely to vary by year and area. From a forage standpoint, livestock producers and resource managers generally consider the net effect of

prairie dogs to be a reduction in available herbaceous forage to livestock. This effect is likely to be exacerbated under drought conditions. Further, adverse impacts to livestock grazing increases with increasing size of prairie dog colonies and closer spaced complexes.

- Recreation

Black-tailed prairie dogs provide wildlife viewing and recreational shooting opportunities. In some parts of Region 6, these activities are of local economic importance. Recreational shooters and some landowner and business interests would like to retain remaining opportunities for recreational shooting.

- Control

Black-tailed prairie dog towns have the ability to expand and become established in areas where they are not desired. Control of these undesired prairie dog towns requires resources and personnel. Management of prairie dogs to meet distribution and abundance standards may facilitate their establishment in unwanted areas.

CHAPTER 2: AFFECTED ENVIRONMENT

The following is a general summary of information taken from the Draft Plan. For more detailed information please refer the Draft Plan.

Prairie Dog Status in Region 6

- Legal Classification

The authority of Montana Fish Wildlife & Parks for managing prairie dogs originates from a number of statutes. The responsibility and authority to "supervise Montana's wildlife" are given to Montana FWP (87-1-201, MCA). Prairie dogs are designated as nongame species under Montana statute 87-5-102, MCA. Montana statute 87-5-103, MCA declares that it is state policy to ensure perpetuation of nongame wildlife as “members of ecosystems.” HB492, passed by the 2001 Montana Legislature, further established authority for FWP to designate prairie dogs as “nongame wildlife in need of management” and provides authority to establish management regulations. HB492 also affirms the ability of landowners to control prairie dogs on private lands.

Black-tailed prairie dogs are also classified by the Montana Department of Agriculture as vertebrate pests (80-7-1101, MCA) and as rodents for purposes of rodent control districts (7-22-2207(6) MCA).

- Abundance and Distribution

There are approximately 34,500 occupied acres (13,960 ha) of prairie dog towns in Region 6 based on current knowledge (Table 1.) and the most recent survey information available. The majority of data was collected from 2000 to 2003. However, some data was collected as early as 1996.

The statewide prairie dog plan (MPDWG 2002) provides for conservation of prairie dogs and associated species according to three categories of prairie dog complexes as determined by applying the 7 km rule for distance to nearest neighbor colony. The "7 km rule" is the convention adopted by the Interstate Black-tailed Prairie Dog Conservation Team. The physical description of a Category 1 complex in the statewide plan is defined as a complex of at least 5,000 acres (2023 ha) of prairie dogs, but may range up to 12,000 acres (4856 ha) following the 7 km rule. A Category 2 complex is defined as a complex of at least 1000 acres (405 ha) of prairie dogs following the 7 km rule. A Category 3 complex is defined as a complex less than 1000 acres (405 ha) of prairie dogs as defined by the 7 km rule plus scattered isolated colonies of any acreage.

Complex size and colony distance rules within a complex have been and are currently debated with regard to minimum requirements for the recovery of black-footed ferrets. The objective of a Category 1 complex is to provide sufficient habitat to sustain a viable population of black-footed ferrets. One mile (1.6 km) between colonies (known as the 1.5 km rule) and a minimum of 5,000 acres (2023 ha) occupied prairie dog habitat is an alternate definition of a complex that may support a viable population of black-footed ferrets (CBSG 2004).

Given the current understanding of prairie dog acreage and distribution, Region 6 supports one Category 1 complex of 24,720 acres (10,004 ha) under the 7 km rule (Table 1.) Under the 1.5 km rule, Region 6 does not support a Category 1 complex. The current known acres occupied by prairie dogs by Category 2 and 3 complexes in Region 6 are listed in Table 1. Locations of complexes by Category are displayed in Figure 1. Some of the colonies within these complexes experienced a plague epizootic event in 2005. Therefore, it is not known exactly how many complexes exist in Region 6 until mapping is completed in the fall and winter of 2005.

Table 1. Known Prairie Dog Acres in Region 6 in 2004, by complex category (as defined by 7 km rule).

Complex Category	Number of Complexes	Current Prairie Dog Acreage (ha)
1	1	24,720 (10,004)
2	3	6,383 (2,583)
3	22	3,415 (1,382)
Total		34,518 (13,969)

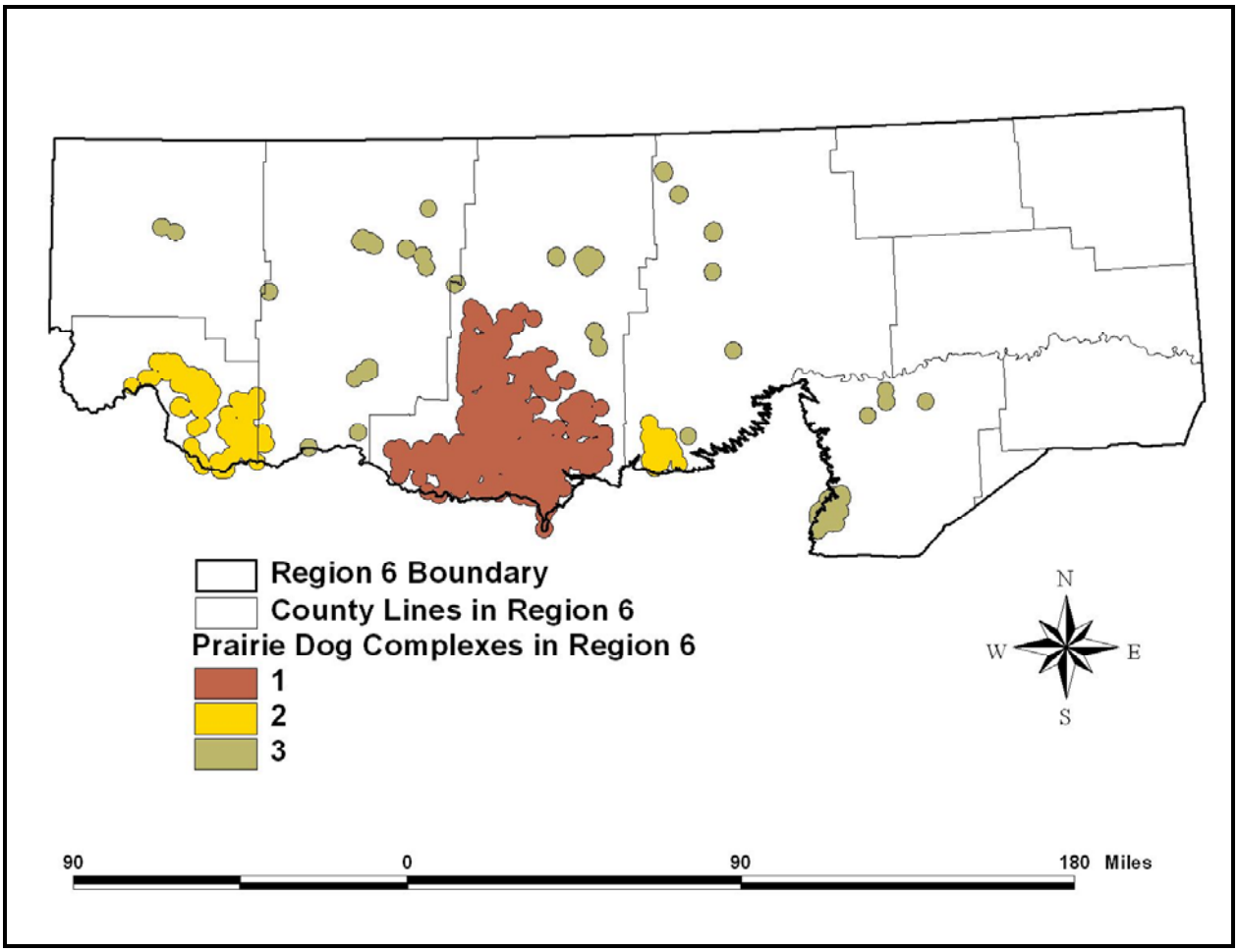

Figure 1. Prairie Dog Complexes as defined by the 7 km rule in Region 6 outside of tribal lands.

Prairie Dog Habitat

- Biological and Physical Environment

Prairie dog towns in Region 6 occur more than expected in areas of Boralf soils and less than expected in areas of Ustert, Boroll, Orthent, Ochrept, and Argid soils (Rauscher 2004). Proctor (1998) also found that prairie dogs in his study in Region 6 were associated with clay-loam soils more than expected.

Rauscher (2004) found that prairie dogs occur more than expected where the slope is 3 percent or less and negatively associated with slopes of 4 - 6 percent. Proctor (1998) found that prairie dogs occurred more than expected on slopes of 0 – 4 percent.

Two independent GIS analyses (Rauscher 2004, Proctor 1988) using GAP Satellites Image Land cover showed that prairie dogs occurred more than expected in dry shrub land, badlands,

barren land, and upland grasslands. Prairie dogs occurred less than expected in dry land agriculture and moderate to high cover grasslands.

There are approximately 22,000 mi^2 (57,000 km^2) of historic prairie dog range within Region 6. Of that range, the major land use is associated with livestock grazing, 16,220 mi^2 (42,000 km^2). The remaining 5,791 mi^2 (15,000 km^2) are primarily associated with crop production.

Plague is known to be one of the primary causes for the range-wide decline in prairie dog distribution and abundance. Sylvatic plague epizootics in black-tailed prairie dog towns are not well understood. Until the processes of sylvatic plague epizootics are better understood and plague management techniques developed, achieving abundance and distribution standards may be problematic and difficult.

- Social Environment

Recreation associated with prairie dog towns in Region 6 consists primarily of prairie dog shooting. Although limited data exists, prairie dog shooting remains popular across Region 6 with the greatest activity in Phillips and Chouteau counties. Other recreational activities associated with prairie dog towns include hunting of game animals, trapping and wildlife viewing.

CHAPTER 3: ALTERNATIVES

The following is a summary of five prairie dog distribution and abundance alternatives that FWP might implement. A more complete description of each alternative is given in the Draft Plan. A comparison of distribution and abundance objectives are given in Table 3 at the end of this Chapter.

1. Alternative A

- Abundance Objectives

This alternative calls for a minimum of approximately 27,000 acres (10,930 ha) of occupied prairie dog habitat in Region 6 not including the Charles M. Russell National Wildlife Refuge (CMR). This alternative does not define an upper limit on abundance, but instead allows the upper limit of prairie dog acreage to be defined by current landowner tolerance.

- Complex Objectives

Alternative A provides acreages within the 3 Complex types as follows:

One Category 1 complex of 5,000 or more acres (2,023 ha) of active dog towns spaced a maximum of 1 mile (1.5km) between towns. A 2-mile (3.2 km) buffer of the Category 1 complex would be kept free of prairie dogs; and,

three Category 2 complexes of 1,000 or more acres (405 ha) of active dog towns. Each town within these complexes would be spaced a maximum of 4.4 miles (7km) apart. A 2-mile (3.2 km) buffer of all Category 2 complexes would be kept free of prairie dogs; and,

the remaining acreage of occupied prairie dog habitat would support Category 3 complexes of less than 1,000 acres (405 ha) each distributed over the historic prairie dog range in Region 6.

- Operational Approach

Under Alternative A, Region 6 would support prairie dog acreages that are based in part on landowner tolerance and the ability of incentives to facilitate planned prairie dog expansion while acknowledging commitments made in existing resource management plans.

Until workable incentives are developed, Phillips County and Valley County would support an acreage ranging between 75% of the 1988 prairie dog abundance levels and up to the 1988 abundance levels. Because 1988 survey information exists only for Phillips and Valley Counties, other counties would use the most current survey information available for a benchmark level. Upon reaching the 1988 levels or benchmark levels, prairie dogs would be controlled to 75% of these levels during a single season.

In counties with fewer than 1,500 acres (607 ha) of occupied prairie dog habitat on public land, 1,500 acres (607 ha) of occupied prairie dog habitat on public land would be the benchmark level. Prairie dogs in these counties would be managed for a range of 75% of benchmark level to the benchmark level. Control would not be initiated in these counties until 1,500 acres (607 ha) of occupied prairie dog habitat was established. Prairie dog acreage in these counties would be allowed to expand to these levels naturally or could be actively managed through translocation into suitable habitat.

As effective incentives, including a control mechanism, become available, planned expansion of prairie dogs on individual ranches would be allowed on a voluntary basis with no upper limits. Planned expansion of prairie dogs would only be initiated with willing landowners or permittees. Although shown as a countywide objective, actual management and acreage objectives would be managed at the allotment or ranch level.

A partnership of stakeholders would work toward development of one or more Rodent Control Districts or other type of prairie dog abatement program. This program would provide control measures on private, state, and federal lands, with the intent to maintain prairie dog acreage levels and to assure controlled expansion of prairie dogs under alternative objectives. Managing agencies and landowners would be responsible for funding prairie dog abatement on public and private lands, respectively, unless otherwise agreed to.

2. Alternative B

- Abundance Objectives

Alternative B calls for approximately 49,000 acres (19,830 ha) of occupied prairie dog habitat in Region 6. This alternative does not define an upper limit on abundance, but instead allows the upper limit of prairie dog acreage to be defined by landowner tolerance.

- Complex Objectives

Alternative B provides a range of acreages within 3 complex types as follows:

Two Category 1 complexes not less than 10,000 acres (4,047 ha) of occupied prairie dog habitat spaced 40 miles (64 km) apart where active dog colonies within each complex are spaced a maximum of 1 mile (1.5 km) between colonies; and,

nine Category 2 complexes of at least 1,000 acres (405 km) of occupied prairie dog habitat that have a maximum of 1 mile (1.5 km) between colonies within the complex; and,

a total of 20,000 acres (8,094 ha) of occupied Category 3 prairie dog towns. A Category 3 complex under this alternative is defined as complexes and isolated colonies too small or too widely spaced to fit within Category 1 or Category 2 definitions.

- Operational Approach

Under Alternative B, Region 6 would work toward developing specific category complexes distributed over the project area. Both Category 1 and 2 complexes would be sited to maximize use of federal (i.e., NWR and BLM) and state lands. Tribal lands could also serve as sites for these complexes if a memorandum of understanding is in place between the tribes and FWP. However occupied acreages on tribal lands would be in addition to what is identified in this alternative.

Both Category 1 complexes under this alternative would be capable of supporting viable black-footed ferret populations. In areas where black-footed ferrets are to be reintroduced in an attempt to establish a permanent population, prairie dog expansion will be encouraged to the maximum extent possible with the concurrence of private landowners involved. If larger complexes are determined to be necessary for maintaining viable populations of prairie dog associated species other that ferrets; complex size and configuration will be redefined to reflect these needs. Further, Category 3 complexes would be distributed within 5 – 20 miles (8 – 32 km) of each Category 1 complex to provide for natural dispersal into Category 1 complex in the event of plague in the Category 1 complex. FWP would work with the Fish, Wildlife & Parks Commission to restrict recreational prairie dog shooting in areas inhabited by black-footed ferrets. Under this alternative, one Category 1 complex would be identified and managed for black-footed ferrets and associated species within a year of this plan's adoption. A second Category 1 complex would be identified and managed for ferret reintroduction within two years of this plan's adoption.

Complex 2 and complex 3 categories would be managed using nine proposed Prairie Dog Conservation Units (PDCUs) as illustrated in Figure 2. Within Region 6, PDCUs include areas where prairie dogs are known to have occurred historically. Highway 2, running west and east, separates northern PDCUs from southern ones.

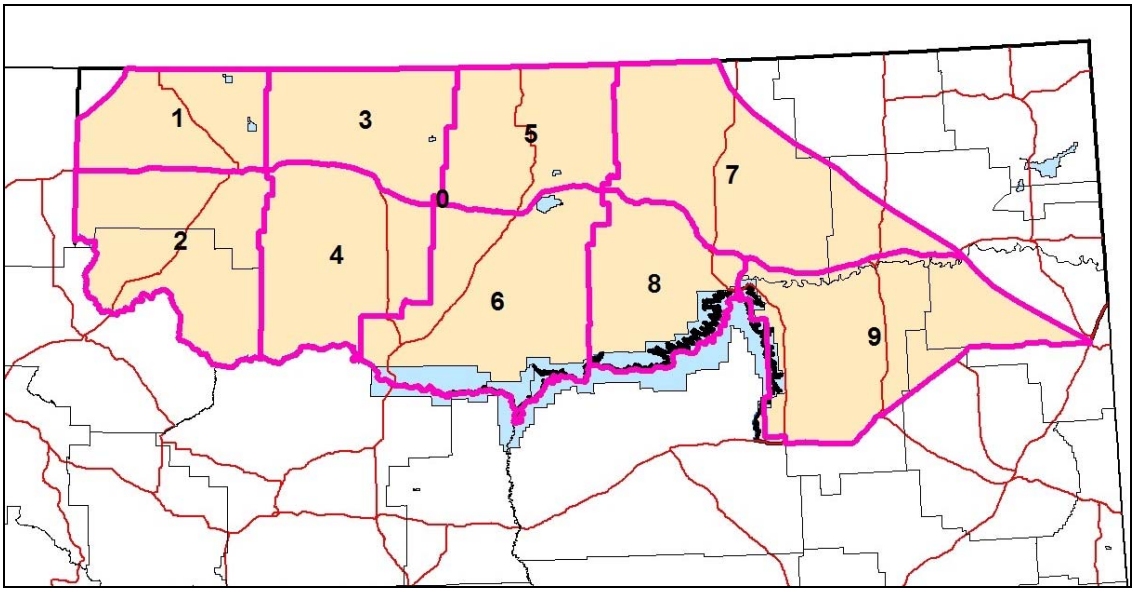

Figure 2. Boundaries of Proposed Prairie Dog Conservation Units in Region 6

A Category 2 complex under this alternative would be developed in each of the PDCUs. These Category 2 complexes under this alternative would serve to support species that utilize prairie dogs and provide the potential to be converted into Category 1 complexes if made necessary by unforeseen events. As compatible, FWP would work to continue to allow prairie dog shooting on Category 2 and 3 complexes. Proposed sites for a Category 2 complex in each PDCU would be identified within a year of plan adoption and management of these sites to achieve Category 2 objectives would be initiated within two years of plan adoption.

Efforts would be made to maintain or develop Category 3 complexes within a 5 - 20 mile (8 – 32 km) radius of each Category 1 complex, which would help serve to re-establish a colony after a plague event. The objective for Category 3 complexes is to assure a widespread geographic distribution of prairie dog colonies throughout areas of acceptable habitat within Region 6, to provide refugia colonies that may be used to repopulate Category 1 or 2 complexes depleted by plague epizootics, and to provide for widespread distribution of species. Under this alternative, management would strive to achieve a distribution of Category 3 complexes and colonies within each PDCU in the same proportion that each PDCU has of the total original range of prairie dogs in Region 6 (Table 2.). Furthermore, PDCUs that maintain Category 1 or Category 2 complexes could subtract 200% of the acres in Category 1 or 2 from their Category 3 acreage targets. Where necessary to establish Category 3 complexes in areas not currently occupied by prairie dogs, the steps to initiate translocation will be initiated within a year of plan adoption and approved translocations will occur as soon as practicable thereafter.

Table 2. Areas of PDCUs in Montana Fish, Wildlife and Parks Region 6 and estimated acreage occupied by prairie dogs.

PDCU	TOTAL ACRES IN PDCU (ha)	ACRES CURRENTLY OCCUPIED BY PRAIRIE DOGS (ha)	% CURRENTLY OCCUPIED WITHIN PDCU	% OF REGION 6 AREA RANGE WITHIN PDCU
1	1,022,741 (413,898)	134 (54)	0.01	7
2	1,656,631 (670,429)	4,901 (1,983)	0.30	12
3	1,166,366 (472,022)	720 (291)	0.06	8
4	1,543,594 (624,684)	583 (236)	0.04	11
5	1,281,306 (518,537)	807 (327)	0.06	9
6	2,050,629 (829,878)	24,826 (10,047)	1.21	14
7	2,170,279 (878,300)	539 (218)	0.02	15
8	1,180,390 (477,697)	1,236 (500)	0.10	8
9	2,126,973 (860,774)	267 (108)	0.01	15
TOTALS	14,198,909 (5,746,220)	34,018 (13,767)	0.24	100

FWP would encourage appropriate federal, state, and private entities to target financial incentives to private and tribal landowners who are willing to maintain Category 1, 2 or 3 complexes. Incentives should be prioritized by complex with Category 1 complexes having the highest value. Complexes with the greatest amount of public land included are a higher priority as well. Participation by private landowners would be voluntary and at the landowners' discretion. This alternative would not impose restrictions regarding the control of prairie dogs on private land. Conversely, when translocations are deemed necessary, all translocations will follow Montana's translocation policy.

3. Alternative C

- Abundance Objectives

This alternative calls for a minimum of approximately 30,000 acres (12,141 ha) of prairie dog habitat in Region 6. This alternative does not define an upper limit on abundance, but instead allows the upper limit of prairie dog acreage to be defined by current landowner tolerance. To reduce the cost and improve the feasibility of implementation, this alternative calls for managing acreage within a specified range (such as 33,000 acres, plus or minus 10%) as opposed to managing for a specific acreage target.

- Complex Objectives

Alternative C provides a range of acreages within 3 complex types as follows:

One Category 1 complex of 5,000-10,000 acres (2023 – 4047 ha) of active dog towns spaced no more than 1 mile (1.5 km) apart. Within this acreage range, the objective would be weighted toward 10,000 acres (4047 ha); and,

six or more Category 2 complexes of 1,000-2,000 acres (405 – 810 ha) of active dog towns. Towns within a complex would be spaced no more than 1 mile (1.5 km) apart. In total, this alternative would support approximately 10,000 acres (4047 ha) of active prairie dog habitat in Category 2 complexes; and,

approximately 10,000 acres (4,047) of Category 3 prairie dog towns would be scattered throughout the historic prairie dog range in Region 6.

- Operational Approach

As an initial step, a Partnership (individuals, agencies, and organizations who have an interest in prairie dogs and who are actively working toward and/or funding prairie dog conservation in Region 6) would work with landowners to maintain current acreage of prairie dog colonies while improving distribution to meet needs of associated species. Strategic alteration of current distribution and abundance to meet the identified goals of the Partnership would require voluntary agreements utilizing incentive programs and a demonstrated ability to control prairie dogs. This approach would include agencies, landowners, lessees, and neighbors who are apt to be affected by projects. The alternative would not focus prairie dog acreage on public lands in preference to other land ownerships. In this alternative, strategies would be employed that most effectively manage prairie dogs and build consensus among stakeholders throughout Region 6, blind to administrative boundaries.

This alternative calls for Category 2 complexes with no more than 1 mile (1.5 km) between towns. This arrangement would facilitate possible testing of the idea that ferret survival might also be possible on complexes of 1,000-2,000 acres (405 –810 ha) in size, and could provide alternative locations for transfer of the Category 1 complex, should the primary site for it fail or become infeasible.

Under the Alternative, FWP would work with the Fish, Wildlife & Parks Commission to maintain recreational shooting opportunities for prairie dogs on public lands in Category 3 complexes, and in Category 2 complexes not hosting ferrets. Shooting opportunities on private lands would continue to be offered in accordance with landowner tolerance. FWP would also work with the Commission to prohibit prairie dog shooting in the Category 1 complex and other ferret recovery zones.

The Partnership would agree to provide control, at the landowners' request, of prairie dogs expanding from the Category 1 complex. This would establish a buffer zone around the Category 1 complex of up to 2 miles wide, where there would be control of prairie dogs across all land ownerships, if landowners requested such control.

4. No Action Alternative

Abundance Objectives

This alternative calls for maintaining acreage objectives identified in current resource management plans (i.e., BLM Big Dry, JVP and West Hi-Line RMPs) and retaining current

management practices. Under this alternative, approximately 26,000 acres (10,522 ha) of occupied prairie dog towns, spaced a maximum distance of 7 km (4.34 miles) between towns, would be maintained in Phillips County (on an allotment-by-allotment basis) based on 1988 prairie dog survey data. In addition, 874 acres (354 ha) of occupied prairie dog habitat would be maintained in Phillips County outside the 7-km Complex based on the 1988 survey. In the Valley RA, 800 acres (324 ha) of occupied prairie dog habitat would be maintained and 71 acres (29 ha) in Judith RA. On other BLM lands in Region 6, BLM would allow for the natural fluctuation of occupied prairie dog acres on public lands. This alternative does not specifically prohibit control or expansion of prairie dogs.

- Complex Objectives

Alternative D provides acreages within the complex types identified in current resource management plans as follows:

One Category 1 complex of 5,000 or more acres (2023 ha) of active dog towns spaced a maximum of 4.34 mile (7km) between towns; and,

Category 2 and Category 3 complexes would not be actively managed other than to maintain 1988 levels.

- Operational Approach

Under Alternative D, Region 6 would support prairie dog acreages that are based on current resource management plans and current management policy. In Phillips County, BLM in cooperation with USFWS and FWP, and through cooperative agreements with CMR, DSL and private landowners, would maintain approximately 26,000 acres (10,522 ha), (12,346 BLM acres (4996 ha), 5,800 CMR acres (2,347 ha), 2,012 DSL acres (814 ha) and 5,827 private acres (2,358 ha)) of occupied prairie dog habitat within the 7-km Complex, based on the 1988 survey. In addition, 874 acres (354 ha) of occupied prairie dog habitat would be maintained in Phillips County outside the 7-km Complex based on the 1988 survey. BLM would maintain 12,346 acres (4996 ha), of prairie dog habitat on BLM land. However these acres may fluctuate according to guidelines in the JVP. If the BLM is able to make agreements through cooperative planning, BLM may reduce or exceed the 12,346 acres (4,996 ha), of occupied prairie dog habitat on BLM land within the 7km Complex. If the BLM cannot reach such cooperative agreements, then BLM will maintain the original 12,346 acres (4,996 ha), of occupied prairie dog habitat on BLM land within the 7km Complex. Prairie dog expansion beyond 1988 levels within the 7km Complex would not be allowed without mitigation. Any loss of livestock forage due to prairie dog habitat increases on BLM land above the 1988 survey levels would be mitigated through land treatments (mechanical, fire, etc.).

In the Valley RA, BLM would manage for 800 acres (324 ha) of occupied prairie dog habitat and in Judith RA, BLM would manage for 71 acres (29 ha) of occupied prairie dog habitat on BLM lands.

Under other Resource Management Plans, BLM would manage one town in the West Hi-Line Resource Area to provide habitat for associated species and provide recreational shooting opportunity. Prairie dog acres under 10 acres (4 ha) would not be actively managed. On other lands in Region 6, BLM would allow for the natural fluctuation of occupied prairie dog acres on BLM lands.

Region 6 would not actively manage prairie dogs on private lands.

Further, FWP would work with the Commission to maintain current regulations already in place. Specifically, FWP would work with the Commission to maintain the regulation that closes the shooting of prairie dogs occupying public lands other than state school trust lands during the months of March, April and May. This regulation does not apply to privately owned lands. Further, FWP would work with the commission to maintain the year-round prairie dog shooting closures on areas designated in Phillips County as black-footed ferret reintroduction areas known as the 40 Complex and Pea Ridge.

5. Alternative E (Preferred Action Alternative)

- Abundance Objectives

The abundance and complex objectives of this alternative was reached by consensus of the Board. This alternative calls for managing active prairie dog acreage within a range from 30,500 acres to 41,400 acres (36,000 acres plus or minus 15%) as opposed to managing for a specific acreage target. This alternative does not preclude the expansion of prairie dog acreage above the specified range nor control within, above or below the specified range.

- Complex Objectives

Alternative E provides acreages within 3 complex types as follows:

One Category 1 complex of 5,000 + acres (2,023 ha) of active dog towns spaced no more than 1.5 km (1mi.) apart. This Category 1 complex will not be actively managed to exceed 10,000 acres (4,047 ha); and,

six to eight Category 2 complexes of 1,000 or more acres (405 ha) of active dog towns. Two or three of these complexes would follow the 1.5 km rule and the remainder would follow the 7 km rule; and,

Category 3 prairie dog towns would be scattered throughout the historic prairie dog range in Region 6.

- Operational Approach

While the abundance and complex objectives of this alternative was reached by consensus of the Board, the operational approach was developed by FWP using portions of the operational approaches found in the previous 4 alternatives. Implementation of Alternative E would be

guided by the Key Considerations and accomplished by employing the tools and resources listed in this document. Effort would be made to avoid adversely affecting the agricultural and local business economy. Additionally, this alternative will be implemented in such a way that it does not create unprecedented conflicts with other Species of Special Concern.

Management for complex objectives would achieve acreage objectives. If known active prairie dog acreages are within the specified range of acreage objectives upon adoption of the Plan, implementation would be directed toward reaching complex objectives. The highest priority would be given to establishment of a Category 1 complex of 5,000+ acres (2,023 ha). The next priority would focus on maintaining existing Category 3 complexes and establishment of Category 2 complexes given the lowest priority.

The establishment of a Category 1 complex as defined by this Alternative would be accomplished by allowing and/or facilitating natural expansion of existing prairie dog towns and/or translocation. Any translocations would follow the translocation protocols in Administrative Rules of Montana. Prior to initiation of actual on the ground work, e.g. translocation, the boundaries of this complex would be defined and all landowners and land management agencies within these boundaries contacted and be in agreement to establishment of this complex. If agreement by land management agencies and landowners cannot be achieved, the complex boundaries would be redefined until agreement is reached. Upon establishment of a minimum of 5,000 acres (2,023 ha) of active prairie dogs, additional acreage to this complex would be allowed to occur naturally without augmentation. It is not intended that this colony exceed a total of 10,000 acres (4,046 ha). After all regional plans are completed, if state plan objective of 2 Category 1 complexes is not achieved, Region 6 would give consideration toward developing a second Category 1 complex following statewide plan definitions of a Category 1 complex, which may occur within reservation boundaries if a MOU is agreed upon.

Establishment of Category 2 complex objectives would follow similar guidelines as the Category 1 complex objective. Initial priorities would be establishment or maintenance of two 1000+ acre (405 ha) complexes under the 1.5 km rule. These complexes should be separated by a minimum of 10 miles (16 km). Secondary priority would be establishment or maintenance of four 1000+ acre (405 ha) Category 2 complexes under the 7 km rule. At least 50 miles (80km) should separate two of these complexes. Category 2 complexes that exceed the minimum acreage by 1,500 acres (607 km) could be counted as two Category 2 complexes.

The objective of Category 3 complexes is to maintain the historic distribution of prairie dogs in Region 6. The focus of maintenance of existing and/or establishment of new Category 3 complexes would be in Blaine North of Highway 2, Phillips north of Highway 2, Valley north of Highway 2, Hill, and McCone counties (referred to here as the Category 3 area). Currently, no prairie dogs are known to exist in those portions of Region 6 within the following counties: Roosevelt, Richland and Dawson. No effort would be expended to establish prairie dogs in those counties.

The current level of prairie dogs on a county-by-county basis represents a level of landowner tolerance. Effort would first be focused on securing the perpetuation of existing colonies in the

counties mentioned above. Further effort would be directed at searching for prairie dog towns that have yet to be documented in the Category 3 area mentioned above. Establishment of Category 1 or Category 2 complexes in the Category 3 area would not be precluded. Re-establishment of Category 3 complexes as a result of a disease outbreak, stochastic event, etc. would follow the guidelines in Category 1 complexes.

All existing state and federal regulations would be followed, e.g. translocation protocol, shooting closures, etc.

Table 3. Region 6 Prairie Dog Distribution and Abundance Alternatives Summary

	Category 1	Category 2	Category 3	Total Acreage
Current Situation	(1) 24,720 Acres 7 km Rule (0)0 Acres 1.5 km Rule	(3) 6383 Acres 7 km Rule (6)* XXX Acres 1.5 km rule	(22) 3415 Acres	34, 518 Acres
Alternative A	(1) 5,000+ Acres 1.5 km Rule	(3) 1,000+ Acres 7 km Rule	Remaining Acres Distributed by County	26,785 Acres + CMR (6122 Acres) (32,907 Total)
Alternative B	(2) ± 10,000 Acres 1.5 km Rule	(9) 1,000+ Acres 1.5 km Rule	20,000 Acres Distributed by PDCU	Approx. 49,000 Acres
Alternative C	(1) 5,000 – 10,000 Acres 1.5 km Rule	(6) 1,000 – 2,000 Acres 1.5 km Rule	10,000 Acres Distributed Across R6	Approx. 30,000 Acres
Alternative D (No Action)	(1) 5,000 Acres 7 km Rule	Not Actively Managed	Not Actively Managed	Approx. 27,800 Acres
Alternative E (Preferred Alternative)	(1) 5,000+ Acres 1.5 km Rule	(6 – 8) 1000+ Acres (2-3) 1.5 km Rule (4-6) 7 km Rule	Maintenance of Existing Colonies Distributed in Category 3 Area	30,500 – 41,400 Acres** (36,000 +/- 15%)

***** Some of the colonies within these complexes experienced a plague epizootic event in 2005. Therefore, it is not known exactly how many complexes and the total acreage of prairie dogs under the 1.5 km rule exist in Region 6 until mapping is completed.

******This alternative does not preclude the expansion of prairie dog acreage above the specified range nor control within, above or below the specified range.

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

This chapter describes the environmental, economic, and cultural consequences of potential actions by FWP as described in the five alternatives in Chapter 3. A summary of FWP actions for each alternative is given prior to the review of environmental consequences. The analysis is limited to the issues raised through public involvement and other relevant considerations. Potential impacts are analyzed in terms of both the Physical/Biological Environment and the Human Environment.

For all alternatives except Alternative D (No Action), FWP would work within the framework of the Key Considerations and use the Prairie Dog Conservation Tools and Resources in the Plan. FWP would also facilitate the formation of an Implementation Committee comprised of agencies, organizations, landowners, and interested stakeholders that would help to guide the process. The Implementation Committee would use the operational approach in each alternative as a course of action for reaching alternative objectives. Some of the actions taken by FWP and/or other entities may be subject to further MEPA review, e.g. translocations.

The primary difference between the alternatives, although each has different operational approaches, lies in acreage and distribution objectives. The analysis of environmental consequences is limited to these differences. The No Action Alternative (4. Alternative D), representing current prairie dog distribution and abundance standards provides a basis for comparison.

Summary of FWP Actions

Alternative A

Under Alternative A, FWP would work toward the distribution objective of establishing one Category 1 complex (1.5 km) rule of a minimum of 5,000 acres(2024ha), maintenance of the three existing Category 2 complexes (7km rule), with the remainder of the occupied prairie dog acres distributed within the historic range of prairie dogs in Region 6 on a county-by-county basis. Further this action would require altering prairie dog distribution to facilitate the establishment of a Category 1 complex under the 1.5 km rule without exceeding the acreage total. This action would require the establishment of an additional 5,778 acres (2,342 ha) of prairie dog towns in 5 counties. Consequently, this would require the removal of an equal acreage of prairie dog habitat within the remaining counties. FWP would take action to assist in the establishment of Rodent Control Districts or similar prairie dog abatement programs to reduce the total prairie dog acreage abundance of occupied prairie dog acres by a minimum of 1611 acres (720 ha). Further, this action would require control of prairie dogs in of a minimum of 23.5 mi^2 (61km^2) surrounding the Category 1 complex, and 21.4 mi^2 (55.5km^2) around each of the three Category 2 complexes for a minimum of 87.7 mi^2 (227 km^2) of active prairie dog control. If effective incentives are developed, acreage totals may be exceeded and; therefore, a reduction of prairie dog acres may not be as pronounced.

Alternative B

Under Alternative B, FWP would take action to expand prairie dog abundance to 49,000 acres (19,830 ha) of occupied prairie dog habitat, an approximate increase of 14,480 acres (5,860 ha). FWP would work towards the distribution goal of establishing two Category 1 complexes (1.5 km rule) of not less than 10,000 acres (4,048 ha) each, nine Category 2 complexes (1.5 km rule) of not less than 1,000 acres (405 ha) each, and 20,000 acres (8,094 ha) of Category 3 complexes distributed in 9 PDCU's. FWP would focus expansion of prairie dogs on federal lands to the extent possible. FWP would work with the Fish, Wildlife & Parks Commission to restrict recreational shooting on prairie dog colonies where black-footed ferrets occur. Further, FWP would take action to assist other agencies and organizations in the development of financial incentives for private landowners willing to maintain prairie dog acres on their land.

Alternative C

Under Alternative C, FWP would take action to maintain occupied prairie dog acres at a minimum of approximately 30,000 acres (12,141 ha) in Region 6. FWP would work toward the distribution goal of establishing one Category 1 complex of 5,000 –10,000 acres (4,048 – 8,096 ha) under the 1.5 km rule, six or more Category 2 complexes under the 1.5 km rule and the establishment of up to an additional 6,585 acres (2,665 ha) of prairie dog acres across the region. Further, this alternative calls for controlling prairie dogs in a buffer zone of up to two miles wide surrounding the Category 1 complex, a minimum area of 23.5 mi^2 (61km^2). Under this alternative, FWP would work to expand the current shooting closures to include the Category 1 complex.

Alternative D (No Action)

Under Alternative D, FWP would not work within the framework of the Key Considerations and use the Prairie Dog Conservation Tools and Resources in the Draft Plan and would not facilitate the formation of an Implementation Committee. FWP would take action to work with management agencies to encourage compliance with prairie dog acreage objectives under current Resource Management Plans for a minimum of approximately 27,000 acres (10,930 ha) and to maintain a Category 1 complex of approximately 26,000 acres (10,522 ha). FWP would also take action to comply with Category 3 complex distribution objectives stated in Objective 2, Strategy B of the statewide plan. Further, FWP would work with the Fish, Wildlife & Parks Commission to maintain current shooting regulations.

Alternative E (Preferred Action)

Under Alternative E, FWP would take action to maintain a minimum abundance objective of 30,500 acres (12,344 ha) of active prairie dog towns. Further, FWP would take action to achieve a distribution goal of establishment of a Category 1 complex of 5,000 – 10,000 acres (2,024 – 4,048 ha) under the 1.5 km rule, maintain at least two category 2 complexes of 1,000+ acres (405+ ha) under the 1.5km rule, and a minimum of four Category 2 complexes of 1,000+ acres (405+ ha) under the 7 km rule while maintaining the historic prairie dog distribution in the

counties where prairie dogs currently exist in Region 6. Further FWP would work with the Fish, Wildlife & Parks Commission to maintain current shooting regulations.

A. PHYSICAL/BIOLOGICAL ENVIRONMENT

1. LAND RESOURCES – Soil, Water, Air, and Vegetation

This section considers impacts to soils and geology, water quality and quantity, vegetation, and air. This section addresses the ecological value and some of the vegetation issues identified through public involvement. None of the actions described in this environmental assessment would have an appreciable effect on air and geology. New proposed distribution and abundance standards in Region 6 by FWP can impact other land resources to varying degrees. Most of the impacts that would occur to land resources are beyond the control of FWP because they would result from a landowner taking actions on private property, other government agencies taking action on government-administered land, or result from another agency not taking actions. The quality and quantity of the resource impacted will depend more on actions taken by other entities and where and to what extent these entities take certain actions.

Alternative A

The net result of this alternative is a reduction in abundance of approximately 1,611 acres (652 ha) of occupied prairie dog habitat until effective incentives are developed. Based on significance criteria, we do not find any appreciable effects on soil, water, or air from Alternative A. The primary impact will be an overall increase in vegetative cover and a change in vegetative composition in the areas where prairie dogs are removed. This change would take time to be observed (Johnson-Nistler et. al. 2004). However, the opposite is true in areas where prairie dogs would be established. Local effects of this alternative would be more pronounced. Secondary impacts may include an increase in seed bank of weeds in areas where prairie dogs are removed.

Alternative B

The net result of Alternative B would be an increase in abundance of approximately 14,500 acres (5,868 ha) of occupied prairie dog habitat over current levels. A major increase in the distribution of prairie dogs would be required under this alternative. The primary impact under this alternative would be an overall decrease in vegetative cover and a change in vegetative composition in the areas where prairie dogs are to be established. Local effects of this alternative would be very pronounced. Areas occupied by black-tailed prairie dogs are characterized by a decrease standing crop biomass, plant species richness, litter, standing crop crude protein, big sagebrush canopy cover and density, and an increase in bare ground and crude protein (Johnson-Nistler et. al. 2004).

Alternative C

Under Alternative C, There would be no managed net increase of prairie dogs in Region 6 until effective incentives and effective prairie dog control have been demonstrated. Until that time,

only natural expansion of existing prairie dog colonies would be allowed. Based on the significance criteria, implementation of Alternative C would not have any significant impacts on soils and geology, water quality and quantity, vegetation, and air until effective incentives and control methods developed. Following the development of incentives and control, there may or may not be a net increase in prairie dog acres, although there would be a change in prairie dog distribution. The primary impact in areas where prairie dogs are controlled would be an overall increase in vegetative cover and a change in vegetative composition. However, due to the heavy disturbance caused by prairie dogs, the recovery to original plant communities may be slow. The opposite is true in areas where prairie dogs would be established. The primary impact in areas where prairie dogs are established would be a decrease in standing crop biomass, plant species richness, litter, standing crop crude protein, big sagebrush canopy cover and density, and an increase in bare ground and crude protein (Johnson-Nistler et. al. 2004). Local effects of this Alternative would be pronounced.

Alternative D (No Action)

Under Alternative D, FWP would work with management agencies to encourage compliance with prairie dog acre objectives under current Resource Management Plans and with private landowners and other stakeholders to comply with acreage and distribution objectives. Based on the significance criteria, implementation of Alternative D would not have any substantial impacts on soils and geology, water quality and quantity, vegetation, and air.

Alternative E (Preferred Action)

Under Alternative E, there would not be a net significant impact to soils and geology, water quality and quantity, vegetation, and air unless current abundance levels are exceeded. The primary impact would occur in areas were prairie dog acreage were established to meet distribution objectives. In areas where prairie dogs are established, there will be a decrease in standing crop biomass, plant species richness, litter, standing crop crude protein, big sagebrush canopy cover and density, and an increase in bare ground and crude protein (Johnson-Nistler et. al. 2004).

2. FISH and WILDLIFE

New FWP actions intended to conserve prairie dogs, associated species, and their habitats are the focus of this environmental assessment. This section analyzes how each of the proposed actions could affect wildlife. This section addresses associated species and portions of the vegetation and wildlife issues identified through public involvement. FWP does not expect any actions described in this environmental analysis to adversely impact fish or aquatic habitats.

Alternative A

The net result of this alternative is a reduction in abundance of approximately 1,611 acres (652 ha) of occupied prairie dog acres. Based on significance criteria, we do not find any substantial negative effects on prairie dogs or associated species. The primary impact of achieving the distribution objective of a 5000 + acre (2024 ha) Category 1 complex under the 1.5 km rule is

expected to be a positive effect on black-footed ferrets. It is currently thought that black-footed ferrets benefit from black-tailed prairie dog complexes of > 5,000 acres (2024 ha) in size, distributed with a maximum prairie dog colony separation of less than 1 mile (1.6 km, CBSG 2004). A secondary impact of increasing the distribution of Category 3 complexes may be an increase in the distribution of some associated species.

Alternative B

The net result of Alternative B would be an increase in abundance of approximately 14,500 acres (5,868 ha) of occupied prairie dog habitat. The primary impact of this increase would be beneficial to prairie dogs and associated species. Achieving the distribution objective of two 10,000 plus acres (4,047 ha) acre Category 1 complex under the 1.5 km rule is expected to have a positive effect on black-footed ferrets. It is currently thought that black-footed ferrets benefit from black-tailed prairie dog complexes of > 5,000 acres (2,024 ha) in size, distributed with a maximum prairie dog colony separation of less than 1 mile (1.6 km, CBSG 2004). A secondary impact would be an increase in the habitat availability for mountain plovers and burrowing owls. Other bird species that routinely use prairie dog colonies and would also benefit from increased habitat. However, species requiring substantial herbaceous vegetative cover or sagebrush, such as sage grouse, will likely be negatively impacted. Careful planning by the Implementation Committee would be required to minimize impacts on those species.

Alternative C

Until effective incentives and control methods are established, there would be no net change in prairie dog abundance under Alternative C. Following the establishment of effective incentives and control methods, a net increase of prairie dog acres would benefit associated species. The primary impact of achieving a distribution objective of a Category 1 complex of 5000+ acres (2,024 ha) is expected to be benefit to black-footed ferrets. It is currently thought that black-footed ferrets benefit from black-tailed prairie dog complexes of > 5,000 acres (2,024 ha) in size, distributed with a maximum prairie dog colony separation of less than 1 mile (1.6 km, CBSG 2004)

Alternative D (No Action)

Based on the significance criteria, there would be no negative impacts to fish and wildlife under Alternative D. Habitat for associated species would not be increased. Habitat for black-footed ferrets would not increase. A secondary impact of this alternative would benefit those species requiring substantial herbaceous vegetative cover or sagebrush from a lack of prairie dogs.

Alternative E (Preferred Action)

Under the preferred Alternative, achieving distribution objectives will likely increase the abundance of prairie dogs. The primary impact of the increase in abundance would be positive effects on prairie dogs and associated species. Habitat availability for mountain plovers, burrowing owls and ferruginous hawks, would increase and other bird species that routinely use prairie dog colonies and would also benefit from increased habitat. Secondarily, those species

requiring substantial herbaceous vegetative cover or sagebrush, such as sage grouse, may be negatively impacted. Achieving the distribution objective of one Category 1 complex of 5,000+ acre (2,024 ha) would benefit black-footed ferrets. It is currently thought that black-footed ferrets benefit from black-tailed prairie dog complexes of > 5,000 acres (2,024 ha) in size, distributed with a maximum prairie dog colony separation of less than 1 mile (1.6 km, CBSG 2004).

B. HUMAN ENVIRONMENT

1. NOISE/ELECTRICAL EFFECTS

New FWP actions identified in this environmental assessment would not result in any noise or electrical effects in the human environment. There were no noise/electrical effects identified through public involvement. Likewise, neither would there be any secondary, cumulative, nor significant noise or electrical impacts.

2. LAND USE

This section considers impacts to lands and their uses, including productivity or profitability, lands with special designations, or impacts on residences. This section addresses the livestock grazing issues and to some extent, the control issues identified through public involvement. Since prairie dogs reduce the quality and quantity of preferred livestock vegetation, their presence can negatively affect land productivity and profitability. The vast majority of prairie dogs occur in grassland areas so very little cropland is expected to be affected by any FWP actions. New state actions analyzed in the environmental assessment would have little or no effect on current land use and would not negatively affect any scientific natural areas or cause the relocation of any residences.

Alternative A

This alternative would result in an additional 5,778 acres (2,338 ha) of prairie dog towns in 5 counties in Region 6 and an overall net reduction of approximately 1,500 occupied prairie dog acres (607 ha) in Region 6. The primary impact to some landowners in the 5 counties that would have an increase in occupied prairie dog acres would be a reduction in land productivity and profitability due to a reduction in livestock forage. Until the exact locations of these increases are known, the amount of forage reduction would be difficult to estimate. Occupation by prairie dogs reduces livestock forage by 70% or more (Rich Adams, pers. comm.). A fiscal amount would be hard to calculate. However, given an estimated 10 – 15 acres per Animal Unit Month (AUM), an additional 5,778 acres (2,338 ha) of prairie dogs would cause an estimated net reduction of 270 – 400 AUMs or more. Secondary impacts could include a reduction in the profitability of some businesses in local communities that would see an increase in prairie dogs. Conversely, some landowners and businesses may see a net increase in land productivity and profitability where prairie dog abundance is reduced resulting from and increase in vegetation. However, recovery of prairie dog disturbance may take a long time (Johnson-Nistler et. al. 2004) and an increase in stocking capacity may take a long time to be realized.

Alternative B

This alternative calls for an increase of approximately 14,000 prairie dog acres (2,338 ha) in Region 6. The primary impact of a significant decrease in livestock forage on impacted lands would be a reduction in land productivity and profitability. Until the exact locations of these increases are known, the amount of livestock forage reduction would be difficult to estimate. Occupation by prairie dogs reduces livestock forage by 70% or more (Rich Adams, pers. comm.). Given an estimated 10 – 15 acres per Animal Unit Month (AUM), an additional 14,000 acres (2,338 ha) of prairie dogs would cause a net reduction of 650 – 980 AUMs. Secondary impacts could include a reduction in the profitability of some businesses in local communities that would see an increase in prairie dogs.

Alternative C

Because this alternative calls for maintaining existing occupied acres while establishing a Category 1 complex (1.5 km rule), and six Category 2 complexes (1.5km rule), there would likely be a net increase in prairie dog acreage under this alternative after effective incentives are developed. The amount of the impacted acres would be difficult to determine until the locations of the complexes are defined. On the impacted areas, there would likely be a net decrease in livestock forage of 70% or more (Rich Adams, pers. comm.), which would result in a decrease in land productivity and profitability. However, if effective incentives are developed, there would likely not be a net decrease in land profitability.

Alternative D (No Action)

This alternative will not have a significant affect on land productivity and profitability.

Alternative E (Preferred Action)

Because this alternative calls for the establishment of a Category 1 complex (1.5 km rule), two or three Category 2 complexes (1.5 km rule), and four or five Category 2 complexes under the 7 km rule, there would likely be a net increase in prairie dog acreage under this alternative. The amount of the impacted acres would be difficult to determine until the locations of the complexes are defined. On the impacted areas, there would be a net decrease in livestock forage of 70% or more (Rich Adams, pers. comm.), which would result in a decrease in land productivity and profitability. However, if effective incentives are developed, there would likely not be a net decrease in land profitability.

3. RISK/HEALTH HAZARDS

New FWP actions identified in this environmental assessment would likely not result in any kind of hazard or health risks. Likewise, neither would there be any secondary, cumulative, nor significant impacts influencing or causing risks or health hazards. Although prairie dogs are known to carry sylvatic plague there have been no reported incidences of sylvatic plague

spreading to humans as a result of prairie dogs. There were no specific risk/health hazard issues identified through public involvement.

4. COMMUNITY IMPACT

This section considers potential impacts to human distribution or population growth, social structure, employment opportunities, transportation, industrial or commercial activities or personal income. This section addresses portions of the livestock grazing and recreation issues identified through public comment. None of the alternatives are expected to have significant community impacts with the possible exception of personal income.

Alternative A

The primary impact to some producers in the 5 county areas having an increase in prairie dog acreage would be a minor reduction in personal income due to a reduction in livestock forage. However, if effective incentives are developed, these should compensate for any net decrease in personal income. Some producers may see an increase in income where prairie dogs are removed; however, it may take years for preferred livestock forage species to recover (Johnson-Nistler et. al. 2004).

Alternative B

The primary impact of a net increase of 14,000 acres (5,868 ha) of occupied prairie dog habitat would very likely be a pronounced decrease in personal income for some livestock producers. Also, the increased restrictions on recreational prairie dog shooting would likely negatively impact some local businesses, such as motels, gas stations, restaurants, and sporting goods stores.

Alternative C

This alternative is not expected to have any negative impacts on personal income since it hinges on developing incentives for private landowners.

Alternative D (No Action)

This alternative is not expected to have any negative impacts.

Alternative E (Preferred Action)

This alternative is not expected to have an appreciable impact on personal income since landowner agreement is necessary before new acreages are established for prairie dogs.

5. PUBLIC SERVICES/TAXES/UTILITIES

New FWP actions identified in this environmental assessment would not result in any changes or impacts to public services, taxes, or utilities. There were no issues that developed from public involvement regarding public services, taxes, and utilities. There would there be any secondary, cumulative, nor significant impacts to public services, taxes, or utilities.

6. AESTHETICS/RECREATION

This section considers impacts on scenic areas, vistas, designated wilderness areas, and on recreation and tourism. This section addresses the recreation issues identified through public comment. FWP actions described in this environmental assessment would not have an appreciable effect on aesthetic resources. Recreation, in the form of wildlife viewing and shooting, could be affected by the proposed alternatives. Whereas the FWP Commission sets regulations, FWP may propose changes to shooting regulations based on this analysis and public response.

Alternative A

The primary impact of this alternative may result in a slight increase in recreational shooting and wildlife viewing in the 5 counties that would have a net increase of prairie dog habitat. The opposite would occur in areas where prairie dog numbers are reduced.

Alternative B

This alternative would result in a decrease of recreational shooting for prairie dogs; however, this would be partially offset by an increase in wildlife viewing opportunities for prairie dogs and associated species.

Alternative C

This alternative is not expected to have any major impacts although there may be a slight increase in wildlife viewing opportunities and a slight decrease in recreational shooting of prairie dogs.

Alternative D (No Action)

This alternative is not expected to have any major impacts.

Alternative E (Preferred Action)

This alternative is not expected to have any substantial impacts although there may be a slight increase in wildlife viewing opportunities.

7. CULTURAL/HISTORICAL RESOURCES

New potential actions by FWP identified in this environmental assessment would not result in any impacts to cultural or historical resources. There were no issues identified from public involvement regarding cultural and historical resources. There would not be any secondary, cumulative, nor significant impacts on cultural or historical resources.

CONCLUSION

Private Property Regulatory Restrictions

Actions described in this environmental analysis do not regulate the use of private, tangible personal property, or real property under a regulatory statute adopted pursuant to the police power of the state; the proposed action does not involve the denial of an application for a permit or other permission; and the proposed action does not restrict the use of a regulated person's private property. Most proposed increases in prairie dog abundance and distribution would be employed using a voluntary, incentive based approach. None of the actions described herein would place regulatory restrictions on private property, therefore the proposed action does not require an evaluation of regulatory restrictions on private property (75-1-201, MCA).

Evaluation of Mitigation, Stipulations, and Other Controls

There are no mitigation, stipulations or other controls associated with the proposed actions. Therefore, no evaluation is necessary. Mitigation requirements and stipulations are more often appropriate for permitting procedures. The nature of the proposed action is to allow FWP to take actions that further conserve prairie dogs and associated species and would help with the recovery of the black-footed ferret. Therefore, it does not involve permitting or granting of a license on which stipulations would be placed.

Finding for Need of Environmental Impact Statement

In Chapter 4, Environmental Consequences, FWP analyzed the impacts of 5 alternatives. For each impact, FWP considered the significance criteria, as set out in 12.2.421, ARM, including a) the severity, duration, geographic extent, and frequency of impact; b) the probability that the impact will occur or reasonable assurance that the impact will not occur; c) growth-inducing or growth-inhibiting aspects of the impact, including the relationship of the impact or contribution to the cumulative impacts; d) the importance to the state and to society of each environmental resource or value affected; e) any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions; and f) potential conflicts with local, state, or federal laws, requirements, or formal plans.

Through these reviews, FWP determined that none of the effects associated with these alternatives would have a significant impact on the physical environment or human population in the area. An EA is therefore the appropriate level of analysis for the proposed action and an Environmental Impact Statement will not be required. Specifically, there are not significant

impacts of the proposed action because Montana currently supports a healthy population of prairie dogs and each alternative is intended to maintain that. The degree to which the alternatives try to maintain and enhance that population vary, but all fit within the larger picture of what the United States Fish and Wildlife Service might or might not do, what other federal agencies such as the BLM, FS, and NRCS are able to do and last but not least, what individual landowners choose to do on their own property.

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